Fourth Grade Compacted Mathematics Newsletter
Marking Period 3, Part 2

MT	Learning Goals by Measurement Topic (MT)
	Students will be able to . . .
Number and Operations in Base Ten	• estimate and use the standard algorithm to multiply multi-digit whole numbers. • determine when to use the standard algorithm to multiply multi-digit whole numbers. • apply understanding of place value to read and write decimals (to the thousandths). • add or subtract decimals (to the tenths, hundredths, and thousandths) using models or drawings; then relate strategies to written methods.
Measurement and Data	• identify volume as an attribute (characteristic) of solid figures (rectangular prisms) and measure volume by counting cubic units. • apply strategies to determine volume. • apply a formula ($V = b \times h$) to determine the volume of rectangular prisms. • solve problems involving volume using real-world situations.
Operations and Algebraic Thinking	• write and interpret numerical expressions using grouping symbols (parentheses). • identify and evaluate (solve) numerical expressions.

Thinking and Academic Success Skills (TASS)

	It is . . .	In mathematics, students will . . .
Evaluation	weighing evidence, examining claims, and questioning facts to make judgments based upon criteria.	• justify strategy used to solve a problem. • examine the method of computation based on the understanding of place value and properties of operations. • solve for the volume of a figure using a formula or counting cubic units and gauge for accuracy.
Metacognition	knowing and being aware of one's own thinking and having the ability to monitor and evaluate one's own thinking.	• share and listen to the ideas of others in order to help clarify understanding of multiplication, division, and volume. • discuss the thought process used to decompose a solid figure.

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Marking Period 3, Part 2

	Learning Experiences by Measurement Topic (MT)		
MT	*In school, your child will . . .*		*At home, your child can . . .*
Number and Operations in Base Ten	• identify the place value of digits within a decimal. • represent decimals using standard, word, and expanded form. • compare decimals by looking at the tenths, hundredths, and thousandths place and explain which decimal number is greater than, less than, or equal to another using knowledge of place value. Example: Compare 11.26 and 11.3 using <, >, or =.		• use flexibility in choosing and explaining a strategy (mental math, partial product, standard algorithm) that can be used to solve real life problems using multiplication. $\begin{array}{r} {}^{2\ 2} \\ {}^{3\ 4} \\ 256 \\ \underline{x47} \\ 1792 \\ \underline{+10240} \\ 12032 \end{array}$ $\begin{array}{r} 43 \\ \underline{x\ 17} \\ 301 \quad {}_{7\ x\ 43} \\ \underline{+\ 430} \quad {}_{10\ x\ 43} \\ 731 \end{array}$ standard algorithm partial products
Measurement and Data	• apply a formula ($V = b \times h$) to determine the volume of rectangular prisms. • solve real-world problems involving volume. Example: A linen closet is 12 inches long, 12 inches wide, and 6 feet high. The volume of a coat closet is 3,456 cubic inches. How many times as much as the volume of a coat closet is the volume of a linen closet?		• play "Guess the Volume Game" by collecting various rectangular objects from around the house (shoebox, cereal box, washing machine, etc.). Predict the volume of each object and then measure the attributes (length, width, height) to find the actual volume.

Operations and Algebraic Thinking	• identify and evaluate numerical expressions.
	Example:
	How are these two expressions related?
	   $(4 + 3) \times 5$ $(4 + 3) \times 10$
			• use parentheses to create an expression.
			Example: How would you create an expression to represent buying 3 children's movie tickets at $7 each and 2 adult movie tickets for $12?
			   $(3 \times 7) + (2 \times 12)$